

ABSTRACT OF THE DISCLOSURE

A wireless network according to the present invention includes a plurality of nodes that transmit and receive radio frequency (RF) signals. An access point broadcasts and receives radio frequency (RF) signals, wirelessly communicates with the plurality of nodes, generates a table containing a list nodes operating in the wireless network, and broadcasts the table to the plurality of nodes. The access point also calculates traffic conditions. A first node receives the table determines a hidden status of a second node in the table. The first node communicates directly with the second node if the second node has a not hidden status and communicates with the second node through the access point if the second node has a hidden status.